

Final Project-1

Lecture 1

PMG496
Research Title

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Lecture Outline

- Introduction to Research Methodology
- Have a finger print in your project
- Characteristics of the scientific research
- Research Process
- Research proposal (See Research proposal template pdf.)
- Research variables
- Select a research title (See Research title pdf.)
- Examples
- Online Lecture
- Exercises
- Online Workshop (online lecture)

Introduction to Research Methodology

مقدمة في منهجية البحث

01



What is the difference between Research and Research Methodology?

ما هو الفرق بين البحث ومنهجية البحث؟

Research

Research refers to the systematic ^يinvestigation of a particular topic or issue to gain new knowledge, insights, or understanding. It involves the collection, analysis, and interpretation of data to answer research questions or test hypotheses. Research can be conducted in various fields, including education, science, social sciences, and more.

يشير البحث إلى التحقيق المنهجي في موضوع أو قضية معينة لاكتساب معرفة أو رؤى أو فهم جديد. يتضمن جمع البيانات وتحليلها وتفسيرها للإجابة على أسئلة البحث أو اختبار الفرضيات. يمكن إجراء الأبحاث في مجالات مختلفة، بما في ذلك التعليم والعلوم والعلوم الاجتماعية وغيرها.

Research methodology

Research methodology refers to the overall approach or strategy used to conduct research. It encompasses the techniques, procedures, and tools employed to gather and analyze data. Research methodology includes the selection of research design, data collection methods, sampling techniques, data analysis procedures, and interpretation of findings.

تشير منهجية البحث إلى النهج العام أو الإستراتيجية المستخدمة لإجراء البحث. ويشمل التقنيات والإجراءات والأدوات المستخدمة لجمع البيانات وتحليلها. تتضمن منهجية البحث اختيار تصميم البحث، وطرق جمع البيانات، وتقنيات أخذ العينات، وإجراءات تحليل البيانات، وتفسير النتائج.

What is the Importance of Research Methodology?

ما هي أهمية منهجية البحث؟

Research methodology

❑ Research methodology plays a vital role in academia for several reasons.

❑ تلعب منهجية البحث دورًا حيويًا في الأوساط الأكاديمية لعدة أسباب.

✓ Firstly, it helps researchers define the scope and objectives of their studies. By clearly stating research questions and objectives, researchers can focus their efforts and avoid unnecessary diversions.

أولاً، يساعد الباحثين على تحديد نطاق وأهداف دراساتهم. من خلال تحديد أسئلة البحث وأهدافه بوضوح، يمكن للباحثين تركيز جهودهم وتجنب الانحرافات غير الضرورية.

Research methodology

❑ Research methodology plays a vital role in academia for several reasons.

❑ تلعب منهجية البحث دورًا حيويًا في الأوساط الأكاديمية لعدة أسباب.

✓ Secondly, research methodology ensures the validity and reliability of research findings. By following systematic procedures, researchers can minimize bias and errors, making their results more trustworthy and accurate.

ثانيًا، تضمن منهجية البحث صحة وموثوقية نتائج البحث. ومن خلال اتباع إجراءات منهجية، يمكن للباحثين تقليل التحيز والأخطاء، مما يجعل نتائجهم أكثر موثوقية ودقة.

Research methodology

❑ Research methodology plays a vital role in academia for several reasons.

❑ تلعب منهجية البحث دورًا حيويًا في الأوساط الأكاديمية لعدة أسباب.

- ✓ Thirdly, research methodology allows for replication and verification of findings. By providing detailed documentation of the research process, other researchers can replicate the study and validate the results. This promotes the growth of knowledge and contributes to the advancement of the field.

ثالثًا، تسمح منهجية البحث بتكرار النتائج والتحقق منها. ومن خلال توفير توثيق تفصيلي لعملية البحث، يمكن للباحثين الآخرين تكرار الدراسة والتحقق من صحة النتائج. وهذا يعزز نمو المعرفة ويساهم في تقدم هذا المجال.

What are The Key Components of Research Methodology

ما هي المكونات الرئيسية لمنهجية البحث؟

Research Philosophy

Positivism

Research Approach

Deductive

Research Purpose

Explanatory & Descriptive

Research Method

Quantitative

Research Strategy

Archival Research

Time Horizons

Longitudinal Study

**Data Collection
Methods**

**Disclosure Index
&
Content Analysis**

**Data Analysis
Methods**

**Descriptive Statistics
Statistics Used to Show Relationships
Multiple Regression Model**

**Target Population and
Sampling**

**NPOs
(Local Charities and NGOs)**

**How do you have a finger
print in your thesis?**

كيف تكون لك بصمة في رسالتك؟

02





الأدوات Tools





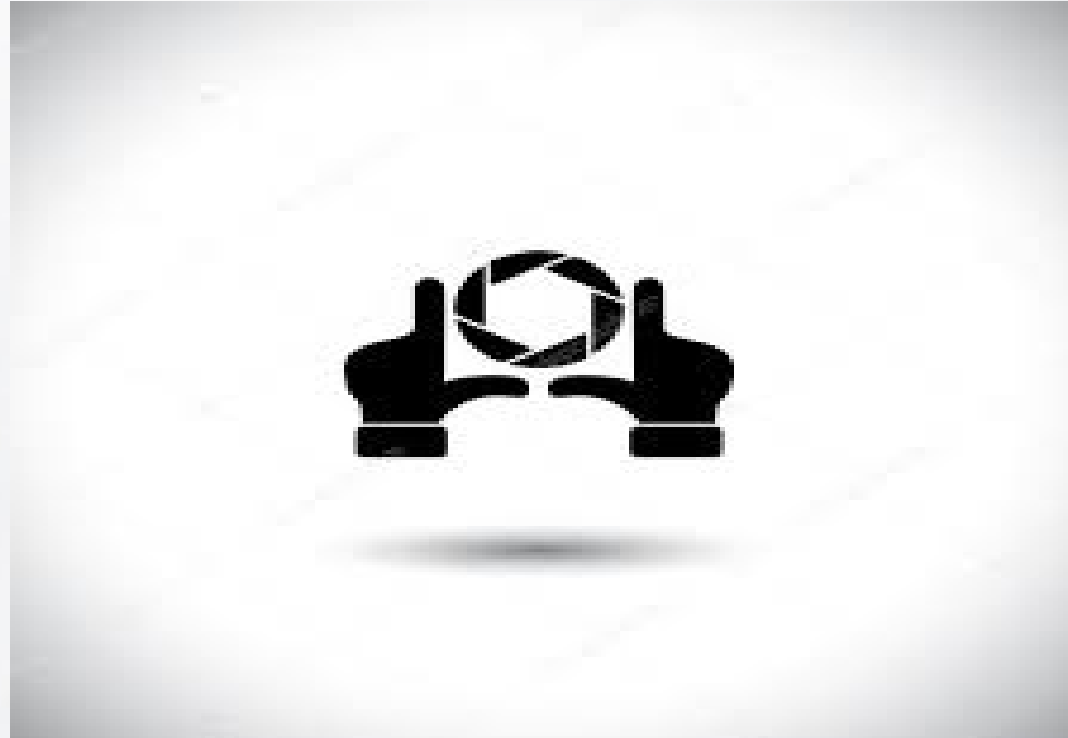








رؤية Vision



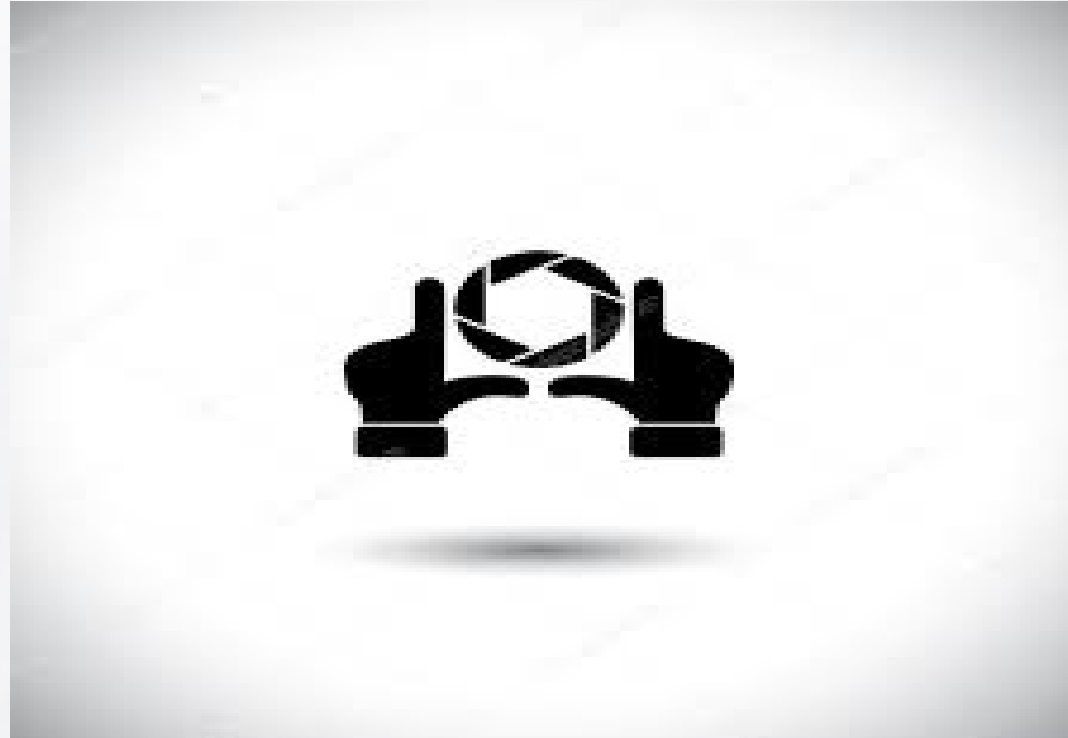


الأدوات Tools





رؤية Vision



GRADUATION AT AN ONLINE SCHOOL

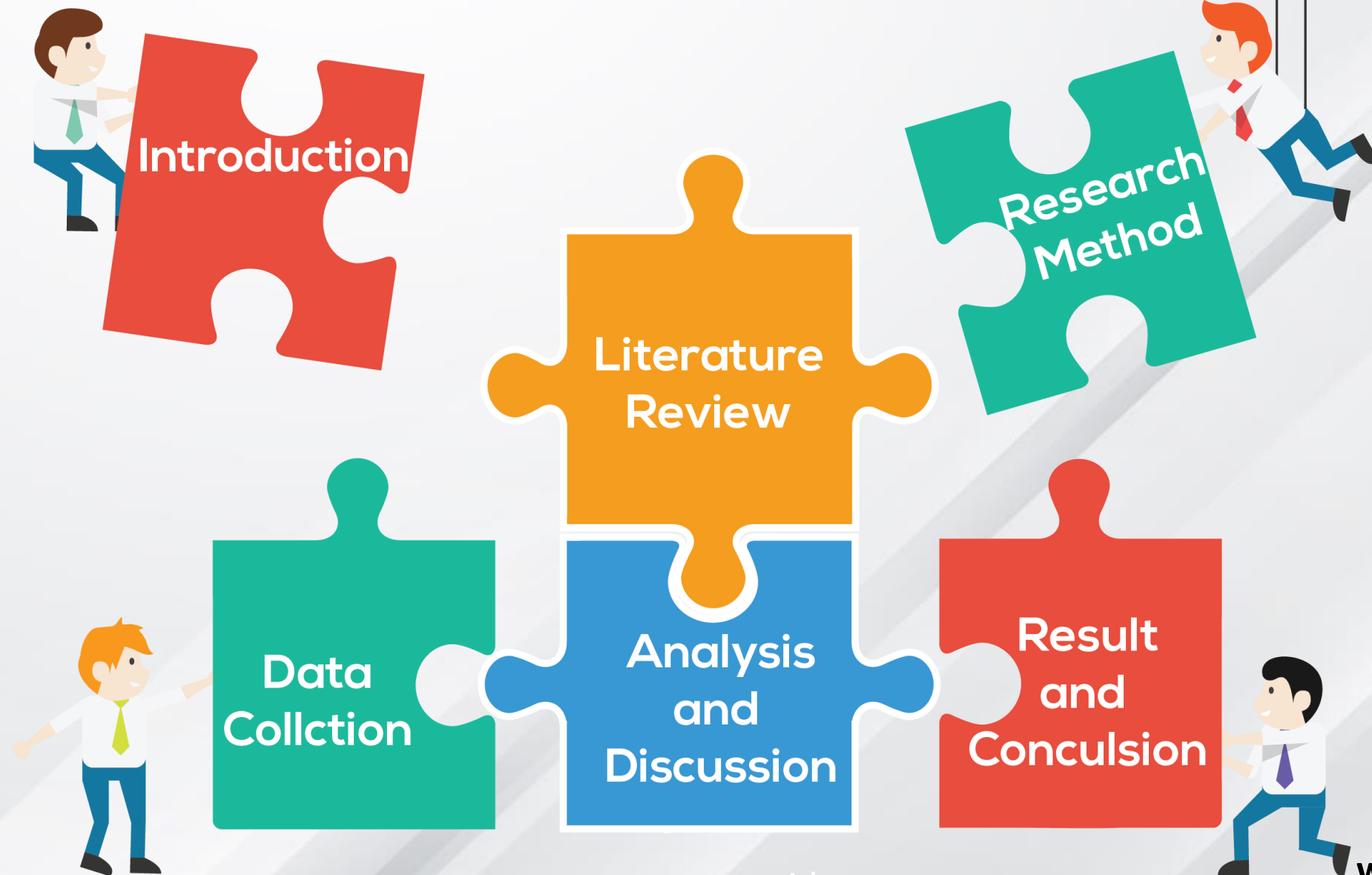


الأدوات Tools









Characteristics of Scientific Research

03



Characteristics of Scientific Research..

1. Purposiveness
2. Rigor
3. Testability
4. Replicability
5. Precision
6. Objectivity
7. Generalizability
8. Parsimony

- We will explain each of these characteristics in the context of the following example:

Consider the case of a manager who is interested in investigating how employees' commitment to the organization can be increased

- The manager has started the research with a definite aim or purpose.
- The focus is on increasing the commitment of employees to the organization, as this will be a beneficial in many ways.

- An increase in employee commitment will translate into less turnover, less absenteeism, and increased performance levels, all of which would definitely benefit the organization.

- A good theoretical base and a sound methodological design would add rigor to a purposive study.
- Rigor means carefulness, and the degree of exactitude **الدقة** in research investigations

- **In the case of our example of increasing the commitment of employees**

- Let us say that the manager of an organization asks 10 of its employees to indicate what would increase their level of commitment to the organization.
- If the manager depends solely on the basis of their responses reaches to several conclusions on how employee commitment can be increased, **the whole approach to the investigation would be unscientific**

- After taking random selection of employees of the organization, and the study of previous research done of the area of organizational commitment, the researcher develops certain hypotheses on how employee commitment can be enhanced.

- Then these hypotheses can be tested by applying certain statistical tests to the data collected for the purpose.
- Scientific research tends itself to testing logically developed hypotheses to see whether or not the data support the hypotheses that are developed

- The results of the tests of hypotheses should be supported again and again when the same type of research is repeated in other similar circumstances.
- If the results are repeated, we will gain confidence in the scientific nature of our research

- **Precision** refers to the closeness of the findings to reality based on a sample.
- **Confidence** refers to the probability that our estimations are correct.

- It is not enough to be precise, but it is also important that we can confidently claim that 95% of the time our results would be true and there is only a 5% chance of our being wrong. This is also known as confidence level.
- The greater the precision and confidence we aim at in our research, the more scientific is the investigation and the more useful are the results

- The conclusions drawn through the interpretation of the results of data analysis should be objective.
- The conclusions should be based on the facts of the findings derived from actual data, and not on our own subjective or emotional values.
- The more objective the interpretation of the data, the more scientific the research investigation becomes.

- Generalizability refers to the scope of applicability of the research findings in one organizational setting to other settings.
- The wider the range of applicability of the solutions generated by research, the more useful the research is to the users

- Parsimony refers to simplicity in explaining the phenomena or problems that occur, and in generating solutions for the problems.
- Economy in research models is achieved when we can build into our research framework a lesser number of variables that would explain the variance far more efficiently than a complex set of variables that would only marginally add to the variance explained.

Research Process

عملية البحث

04



Stages of Research Process

مراحل عملية البحث

Research Process

The research process refers to the systematic and organized approach used to gather information, analyze data, and draw conclusions in order to answer a research question or investigate a specific topic. It typically involves the following steps:

تشير عملية البحث إلى المنهج المنظم المستخدم لجمع المعلومات وتحليل البيانات واستخلاص النتائج من أجل الإجابة على سؤال بحثي أو التحقيق في موضوع معين. يتضمن عادةً الخطوات التالية:

Research process

Choose your research topic

Narrow it down and find your niche

Identify a research problem

Develop clear research questions

Create a research design to answer them

Write your research proposal

Research proposal(Project 1)

مكونات مقترح البحث(المشروع ١)

05

[See Research proposal template pdf](#)



What is the research proposal?

ما هو مقترح البحث؟

Research Proposal

A research proposal is an essential document in the field of academia, particularly for postgraduate students. It serves as a blueprint for the research study and outlines the objectives, methodology, and significance of the proposed research.

يعد مقترح البحث وثيقة أساسية في المجال الأكاديمي، خاصة لطلاب الدراسات العليا. وهو بمثابة مخطط للدراسة البحثية ويحدد أهداف البحث المقترح ومنهجيته وأهميته.

What are the components of a research proposal?

ما هي مكونات مقترح البحث؟

Research Proposal Components

Research Title عنوان الدراسة

Introduction المقدمة

Research Problem مشكلة الدراسة

Research Significant أهمية البحث

Research Questions أسئلة الدراسة

Research Objectives أهداف الدراسة

Research Model & Hypotheses نموذج وفرضيات الدراسة

Research Methodology منهجية الدراسة

Scope of Study الدراسة الميدانية

Proposed Research Structure الهيكل المقترح للدراسة

References قائمة المراجع

Research variables

متغيرات البحث

06



What the Meaning of Research variables?

ما معنى متغيرات البحث؟

- Research variables are characteristics or attributes that can be measured and analyzed in a research study.
• متغيرات البحث هي خصائص أو سمات يمكن قياسها وتحليلها في دراسة بحثية.
- They are the key elements that researchers manipulate, measure, or observe to understand their relationship with other variables.
• وهي العناصر الأساسية التي يتلاعب بها الباحثون أو يقيسونها أو يلاحظونها لفهم علاقتها بالمتغيرات الأخرى.
- In management research, variables can be classified into four main types: independent variables, dependent variables, mediating variables and moderating variables.
- في البحوث الإدارية، يمكن تصنيف المتغيرات إلى أربعة أنواع رئيسية: المتغيرات المستقلة، والمتغيرات التابعة، والمتغيرات الوسيطة، والمتغيرات المعتدلة.

Independent Variables:

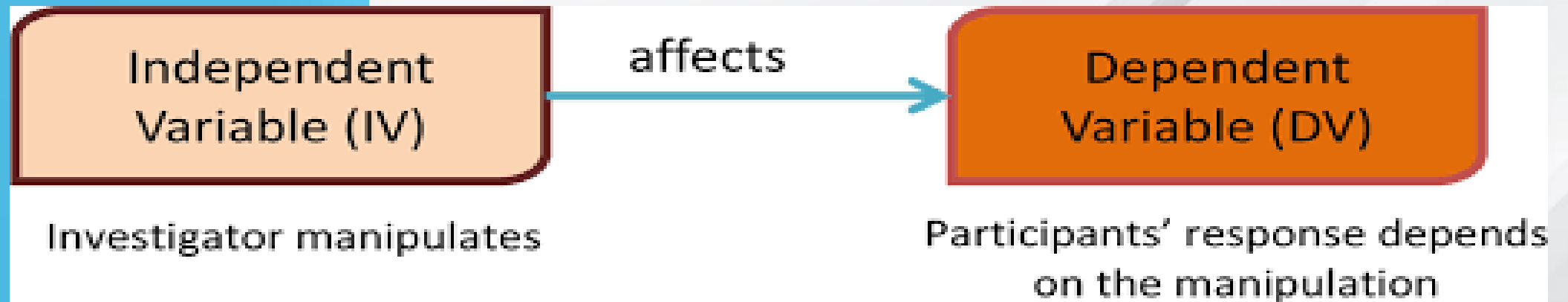
❑ Independent variables are the factors that researchers manipulate or control in a study. They are the causes or predictors of the outcome or dependent variable.

❑ المتغيرات المستقلة هي العوامل التي يتلاعب بها الباحثون أو يتحكمون فيها في الدراسة. إنها الأسباب أو المتنبئين بالنتيجة أو المتغير التابع.

For example, if researchers want to investigate **the effect of leadership style on employee satisfaction**, the independent variable would be....

The leadership styles.

Independent Variables:



Dependent Variables:

❑ Dependent variables are the outcomes or results that researchers measure or observe. They are influenced by the independent variables

❑ المتغيرات التابعة هي النتائج التي يقيسها الباحثون أو يلاحظونها. أنها تتأثر بالمتغيرات المستقلة

For example, if researchers want to investigate the effect of leadership style on employee satisfaction, the dependent variable would be....

Employee satisfaction

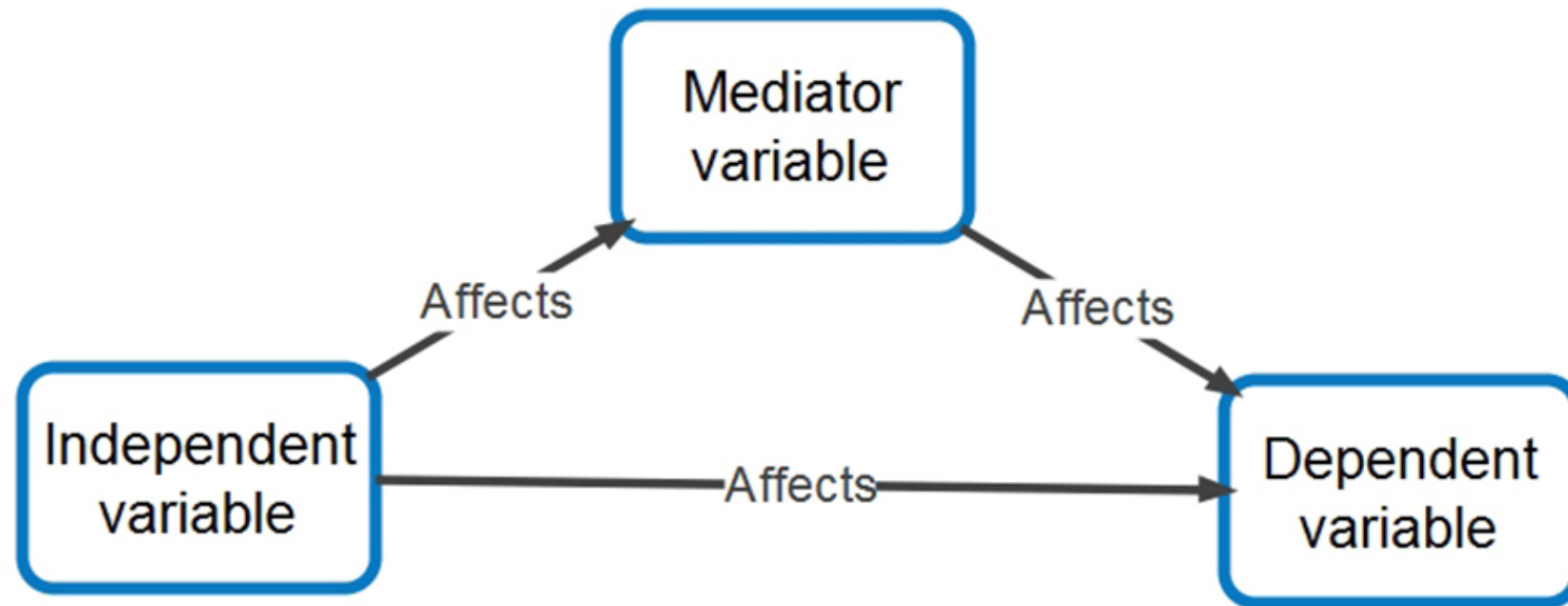
Mediating variables

- Mediating variables are variables that help explain the relationship between the^y independent and dependent variables. They act as intermediate factors that transmit the effect of the independent variable to the dependent variable
- المتغيرات الوسيطة هي متغيرات تساعد في تفسير العلاقة بين المتغيرات المستقلة والتابعة. وهي تعمل كعوامل وسيطة تنقل تأثير المتغير المستقل إلى المتغير التابع

For example, if researchers want to investigate the effect of leadership style on employee satisfaction via Leader's interpersonal skills, the mediating variable would be....

Leader's interpersonal skills

Mediating variables



Moderating variables

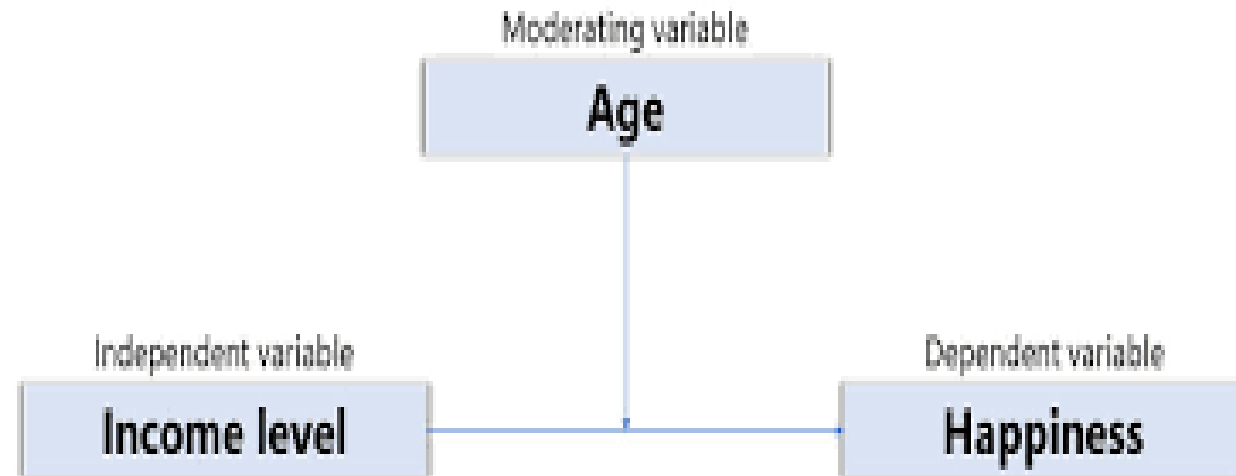
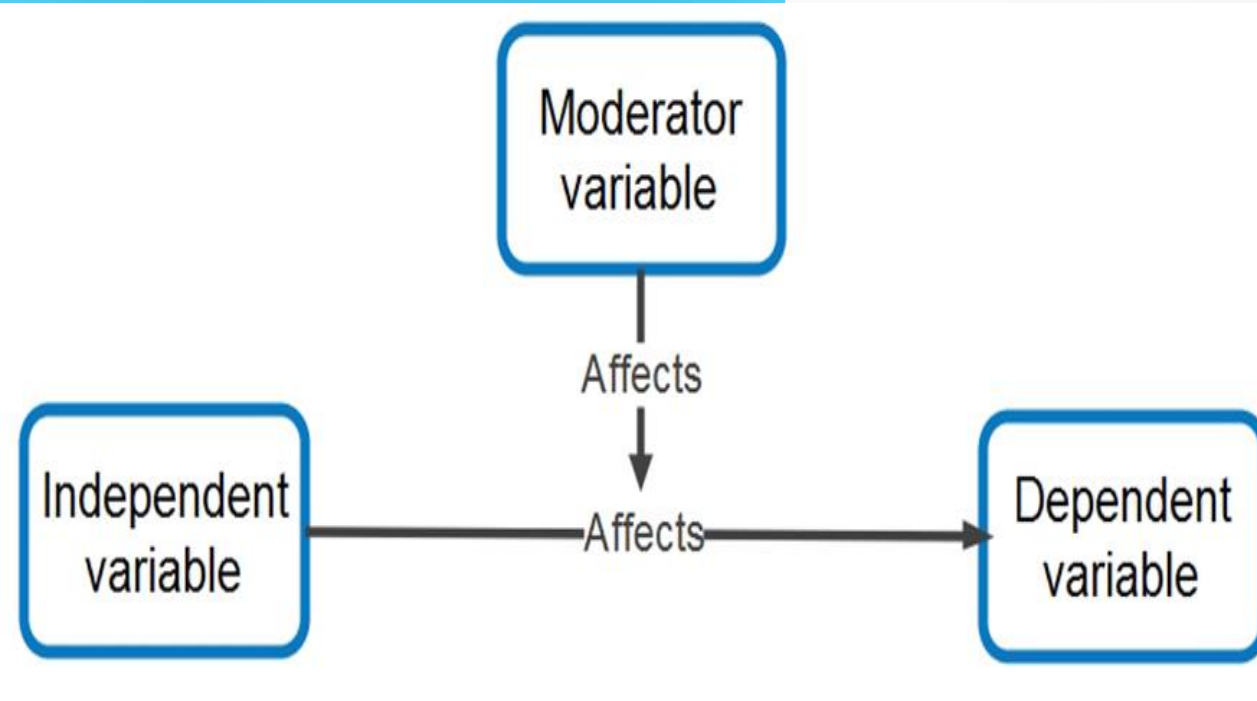
❑ Moderating variables influence the strength or direction of the relationship between the independent and dependent variables. They interact with the independent variable to determine the outcome on the dependent variable

❑ تؤثر المتغيرات المعدلة على قوة أو اتجاه العلاقة بين المتغيرات المستقلة والتابعة. يتفاعلون مع المتغير المستقل لتحديد النتيجة على المتغير التابع

For example, if researchers want to investigate **The effect of demographic variables on the relationship between leadership style and employee satisfaction**, the moderating variable would be....

Demographic Variables

Moderating variables



The impact of risk mitigation strategies on financial losses

The independent: risk mitigation strategies

The dependent: financial losses

The relationships between project scope and project completion time

The independent: **project scope**

The dependent: **project completion time**

Select a Research Title

اختر عنوان البحث

See Research title pdf

06



What is the Importance of Selecting a Research Title?

ما أهمية اختيار عنوان البحث؟

- ❑ The research title serves as a concise representation of the study's focus and objectives. It should be clear, concise, and reflective of the research problem or question.
- ❑ A well-chosen research title not only captures the attention of readers but also provides a framework for the entire research process.
- ❑ عنوان البحث بمثابة تمثيل موجز لتركيز الدراسة وأهدافها. ويجب أن تكون واضحة وموجزة وتعكس مشكلة البحث أو سؤاله. إن عنوان البحث المختار جيدًا لا يجذب انتباه القراء فحسب، بل يوفر أيضًا إطارًا لعملية البحث بأكملها.

What are Criteria for Good Research Titles?

ما هي معايير العناوين البحثية الجيدة؟

Criteria for Good Research Titles

- A good research topic should be feasible (can be done), interesting, novel, ethical and relevant (has an implication)

يجب أن يكون موضوع البحث الجيد ممكنًا (يمكن القيام به)، مثيرة للاهتمام، جديد، أخلاقي و ذو صلة (له أثر)

FINER :

F = feasible

I = interesting

N = novel

E = ethical

R = Relevant

Criteria for Good Research Titles

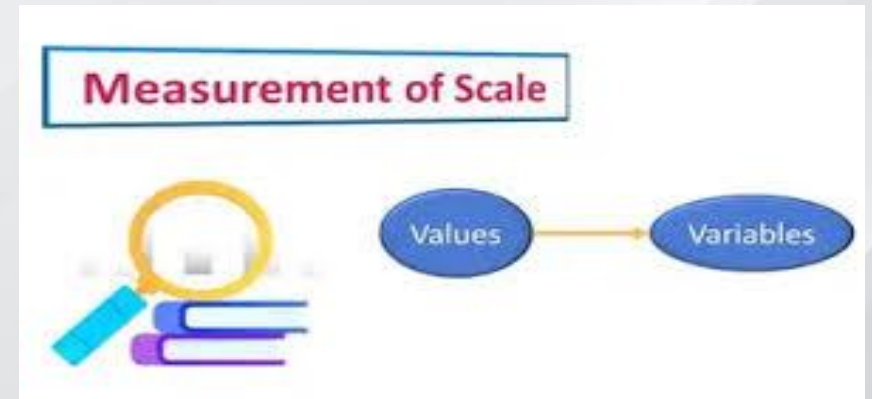
- Clarity and Conciseness الوضوح والإيجاز
- Relevance and Significance الصلة والأهمية
- Specific محدد
- Originality and Uniqueness الأصالة والتفرد

Criteria for Good Research Titles

- Availability of previous studies توفر الدراسات السابقة



- Measurable القابلية للقياس



Examples of Research Titles

أمثلة على عناوين البحوث

"The Impact of Leadership Styles on Employee Motivation in the Retail Industry"

"أثر أنماط القيادة على تحفيز الموظفين في صناعة البيع بالتجزئة"

"Exploring the Relationship between Organizational Culture and Employee Job Satisfaction in Multinational Corporations"

"استكشاف العلاقة بين الثقافة التنظيمية والرضا الوظيفي للموظفين في الشركات المتعددة الجنسيات"

"An Analysis of Cybersecurity Risks in Financial Institutions: A Case Study of XYZ Bank"

"تحليل مخاطر الأمن السيبراني في المؤسسات المالية: دراسة حالة بنك XYZ"

"Examining the Effectiveness of Risk Assessment Models in the Oil and Gas Industry"

"دراسة فعالية نماذج تقييم المخاطر في صناعة النفط والغاز"

"Investigating the Factors Influencing Project Success in Construction Industry Projects"

"دراسة العوامل المؤثرة على نجاح المشاريع في مشاريع صناعة البناء"

"The Role of Agile Methodologies in Managing Software Development Projects: A Comparative Study"

"دور المنهجيات الرشيقية في إدارة مشاريع تطوير البرمجيات: دراسة مقارنة"

Online Lecture



Exercises \

07



Good and Bad Research Titles

☐ Which of the following research titles is an example of a good research title?

- a) "The Effects of Exercise on Physical Fitness"
- b) "My Thoughts on Physical Fitness"
- c) "Physical Fitness: A Study"
- d) "Physical Fitness and Stuff"

a) "The Effects of Exercise on Physical Fitness"

☐ Which of the following research titles is an example of a bad research title?

- a) "The Impact of Climate Change on Global Agriculture"
- b) "A Comprehensive Analysis of Climate Change and Its Effects on Agriculture"
- c) "Climate Change and Agriculture"
- d) "Climate Change: A Research Paper"

d) "Climate Change: A Research Paper"

☐ Which of the following research titles is an example of a good research title?

- a) "The Benefits of Technology in the Classroom"
- b) "Technology in Education"
- c) "Using Technology to Enhance Learning"
- d) "Technology: A Study"

c) "Using Technology to Enhance Learning"

☐ Which of the following research titles is an example of a bad research title?

a) "The Relationship Between Parent Involvement and Student Achievement"

b) "Parent Involvement and Student Achievement: A Quantitative Study"

c) "The Impact of Parent Involvement on Student Achievement"

d) "Parent Involvement: A Research Paper"

d) "Parent Involvement: A Research Paper"

Exercises ۲



Mentimeter

07



Evaluate Research Titles



■ اكتب أسمك + تعليق

<https://www.menti.com/aldxwb1axvvv>

□ هل هذا العنوان جيد أم لا؟

□ حدد أنواع المتغيرات؟

□ مكان التطبيق؟

الوضوح والإيجاز Clarity and Conciseness

الصلة والأهمية Relevance and Significance

محدد Specific

الأصالة والتفرد Originality and Uniqueness

توفر الدراسات السابقة Availability of previous studies

القابلية للقياس Measurable

Workshop



08

**Brainstorming Activity to generate
potential research titles**



:Padlet

مطلوب من كل طالب تحديد عنوان بحثي يحتوي على معايير العنوان
الجيد

مع تحديد:

أنواع المتغيرات بالعنوان: مستقل، تابع - وسيط، معدل (إن وجد)
مكان التطبيق - عينة الدراسة

Clarity and Conciseness الوضوح والإيجاز

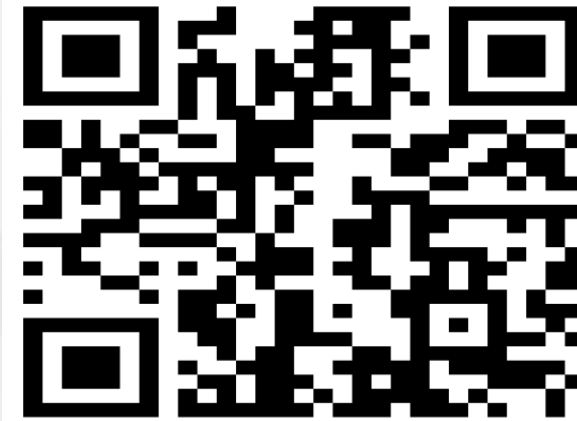
Relevance and Significance الصلة والأهمية

Specific محدد

Originality and Uniqueness الأصالة والتفرد

Availability of previous studies توفر الدراسات السابقة

Measurable القابلية للقياس



<https://padlet.com/monaashry77/brainstorming-activity-to-generate-potential-research-titles-l514v7r0c4qvrbtn>



Thank You